

ABSTRACT OF THE DISCLOSURE

A low-capacitance bonding pad for a semiconductor device. A diffusion region is formed in a substrate, and a bonding pad is formed on the substrate and aligned with the diffusion region. The bonding pad is made from a stacked metal layer and a metal layer. The stacked metal layer is made from a plurality of metal layers and a plurality of dielectric layers, and the metal layers and the dielectric layers are stacked alternately. The metal layers stacked in the stacked metal layer are formed with small areas. Each of the metal layers stacked in the stacked metal layer is coupled with the adjacent metal layer by via plugs.